

Title (en)

PRECISE DELIVERY OF THERAPEUTIC AGENTS TO CELL MITOCHONDRIA FOR ANTI-CANCER THERAPY

Title (de)

GENAUE ABGABE VON THERAPEUTIKA AN ZELLMITOCHONDRIEN ZUR KREBSTERAPIE

Title (fr)

ADMINISTRATION PRÉCISE D'AGENTS THÉRAPEUTIQUES EN DIRECTION DES MITOCHONDRIES CELLULAIRES DANS LE CADRE D'UNE THÉRAPIE ANTICANCRÉUSE

Publication

**EP 3016715 A4 20170208 (EN)**

Application

**EP 14819395 A 20140701**

Priority

- US 201361841657 P 20130701
- US 2014045131 W 20140701

Abstract (en)

[origin: WO2015002996A1] Described is a targeted molecular scaffold for construction of a metabolic inhibitor loaded with cancer-cell specific activity and anti-tumor immunity. Incorporation of a mitochondria targeting moiety such as triphenylphosphonium cation through a biodegradable linker is allowed for mitochondria targeting of certain metabolic inhibitors like dichloroacetic acid (DCA).

IPC 8 full level

**A61P 35/00** (2006.01); **A61K 31/352** (2006.01)

CPC (source: EP US)

**A61K 9/5146** (2013.01 - EP US); **A61K 9/5184** (2013.01 - EP US); **A61K 31/663** (2013.01 - EP US); **A61K 31/675** (2013.01 - EP US);  
**A61K 45/06** (2013.01 - EP US); **A61K 47/54** (2017.07 - EP US); **A61K 47/593** (2017.07 - EP US); **A61P 35/00** (2017.12 - EP);  
**A61P 35/02** (2017.12 - EP); **C07F 9/5442** (2013.01 - EP US); **C07F 9/6518** (2013.01 - EP US)

Citation (search report)

- [XY] US 2011059922 A1 20110310 - ZARLING DAVID A [US], et al
- [X] US 2012157385 A1 20120621 - SELWOOD DAVID [GB], et al
- [XY] WO 2009036092 A2 20090319 - UNIV MASSACHUSETTS [US], et al
- [Y] US 2009118370 A1 20090507 - MICHELAKIS EVANGELOS [CA], et al
- [Y] US 2010260676 A1 20101014 - HANSON ROBERT N [US], et al
- [XY] S. MARRACHE ET AL: "Engineering of blended nanoparticle platform for delivery of mitochondria-acting therapeutics", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, vol. 109, no. 40, 18 September 2012 (2012-09-18), pages 16288 - 16293, XP055212398, ISSN: 0027-8424, DOI: 10.1073/pnas.1210096109
- See references of WO 2015002996A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2015002996 A1 20150108**; EP 3016715 A1 20160511; EP 3016715 A4 20170208; JP 2016523926 A 20160812; US 10004809 B2 20180626;  
US 2016339106 A1 20161124

DOCDB simple family (application)

**US 2014045131 W 20140701**; EP 14819395 A 20140701; JP 2016524327 A 20140701; US 201414902514 A 20140701